

CLAIMS

1. A blow molding or stretch-blow molding installation for manufacturing receptacles from blanks (3) of thermoplastic polymer, in particular polyethylene terephthalate (PET), said installation comprising a blow nozzle (10) of the bell-nozzle type for blowing a fluid under pressure into a blank (3) disposed in a cavity (2) of a mold (1), said nozzle (10) having its end in the shape of a bell (11) which is suitable, during blow-molding, for being pressed into leaktight end-to-end abutment against a wall (F) of the mold (1) while capping the neck (7) of the blank (3) that emerges from said wall against which said blank is in abutment via an annular collar (8) while its body (9) is engaged in said cavity (2) of the mold;

said installation being characterized in that it further comprises means (16₁, ..., 16₅) for securing the nozzle to said wall of the mold by releasable mutual attraction, which means can be activated, after the nozzle (10) has been brought into end-to-end contact with said wall (F) of the mold (1) without flattening a sealing gasket (13), so as to attract the nozzle (10) and said wall (F) towards each other with an attraction force greater than the repulsion force due to the pressure of the blow-molding fluid.

2. A blow-molding installation according to claim 1, characterized in that the means for securing by mutual attraction are mechanical means (16₁).

3. A blow-molding installation according to claim 2, characterized in that the mechanical means (16₁) for securing by mutual attraction comprise at least one device for securing by fastening the nozzle to said mold wall, which device comprises firstly at least one bar (17) secured to said wall (F) of the mold and secondly at

least one curved finger (20) pivotally supported by the bell (11) of the nozzle (10), said finger (20) being of varying curvature and being suitable for being engaged under said bar (17) with a force being generated that urges the nozzle (10) and the wall (F) of the mold towards each other.

4. A blow-molding installation according to claim 1, characterized in that the means for securing by mutual attraction are fluid means (16₂) suitable for generating suction at the surface of the wall (F) of the mold facing the end wall (26) of the bell (11) of the nozzle.

5. A blow-molding installation according to claim 4, characterized in that the fluid means (16₂) for securing by mutual attraction are pneumatic means which comprise an annular groove (27) formed in the wall (F) of the mold (1) and in which at least one channel (28) opens out in communication with means (31) for generating suction, said annular groove (27) having a diameter substantially equal to the diameter of the end wall (26) of the bell (11) of the nozzle that is situated facing it.

6. A blow-molding installation according to claim 1, characterized in that the means (16) for securing by mutual attraction are magnetic means (16₃, 16₄).

7. A blow-molding installation according to claim 6, characterized in that the magnetic means (16₃, 16₄) for securing by mutual attraction comprise at least one magnetic device carried by the nozzle (10), said magnetic device having selective control means for establishing or interrupting the magnetic flux, and a zone made of a ferromagnetic material provided on said wall (F) of the mold (1) facing the nozzle (10).

8. A blow-molding installation according to claim 7, characterized in that the magnetic device comprises at least one permanent magnet (47) supported by the nozzle and a moving magnetic screen (48) associated functionally with said magnet for allowing the magnetic flux from said magnet to pass or for interrupting said magnetic flux.

9. A blow-molding installation according to claim 7, characterized in that the magnetic device comprises at least one permanent magnet (35) supported by the nozzle (10) and an electrical control associated functionally with said magnet and suitable for acting, when it is excited, to generate magnetic flux substantially canceling out the magnetic flux from the magnet.

10. A blow-molding installation according to claim 1, characterized in that the means for securing by mutual attraction are electromagnetic means (16₅) which comprise at least one electromagnet (39-41) supported by the nozzle (10) and which are suitable for co-operating functionally with the wall (F) of the mold or a portion of said wall that is made of a ferromagnetic material, in particular steel.

11. A blow-molding installation according to any one of claims 1 to 10, characterized in that the mold (1) is equipped with a removable neck plate (32) that is secured to said wall (F) of the mold, and in that, on the mold (1), the means for securing by mutual attraction are provided in said neck plate (32).